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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,751	09/12/2003	Thomas D. Williams	62451.00003	5984

32294 7590 03/12/2007
SQUIRE, SANDERS & DEMPSEY L.L.P.
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8000 TOWERS CRESCENT
TYSONS CORNER, VA 22182

EXAMINER

PATEL, JAYESH A

ART UNIT	PAPER NUMBER
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2624

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/660,751

Applicant(s)

WILLIAMS ET AL.

Examiner

Jayesh A. Patel

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This office action vacates the action mailed 1/31/07. The response period will be restarted with the mailing of this action.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: For example in the detailed description of the preferred embodiments on Page 15 Cameras 20,22 and 24 are not there. Like wise on Page 14 the Fig 1 does not have dashed line "as in Fig 1 by the dashed line". Also Page 23 of the descriptions says, "As shown in Fig 7", but there is no figure 7 in the drawings. All the elements of the drawings in the specifications and the drawings do not match. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities: The numberings of Figures and the corresponding elements in the figures as disclosed in the descriptions does not match. This is for all the drawings. For example in the detailed description of the preferred embodiments on Page 15 Cameras 20,22 and 24 are not there. Like wise on Page 14 the Fig 1 does not have dashed line "as in Fig 1 by the dashed line". Also Page 23 of the descriptions says, "As shown in Fig 7", but there is no figure 7 in the drawings. All the elements of the drawings in the specifications and the drawings do not match. Appropriate corrections in the drawings are required.

Claim Rejections - 35 USC § 112

Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase "There is no testing step or further improvement" does not further limit the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by an article Human tracking in multiple Cameras (Computer Vision, 2001 ICCV 2001.937537) by Khan, S., Javed, O., Rasheed, Z., and Shah, M. hereafter Khan.

1. Regarding Claim 1, Khan discloses, a method and system (**Abstract**) for creating a novel viewpoint image from a plurality of images comprising the steps of a. Simultaneously and continuously acquiring sets of images from a plurality of cameras in (**Introduction Lines 3-5**); Using predetermined background based correspondence fields to detect novel objects at (**Col 2 Lines 16-18, 23-25 and 28-30**, Khan also discloses in **section 4** the use of background subtraction for tracking people); Assigning the image representations for these objects likely new correspondences (**Col 3 Lines 22-24**); Testing these likely new correspondences and further improving upon them in a refinement step (**Col 2 Lines 34-41**); and Using the resulting correspondences, construct a novel viewpoint image (**Col 6 Lines 16-19 and Abstract 11-14**).

2. Regarding Claim 2, Khan discloses a method in claim 1 wherein a. The background based correspondence field is generated by an automatic means that, on an application basis, slowly changes to accommodate such slow changes in the background environment in (**Col 9 Lines 4-11**).

3. Regarding Claim 3, Khan discloses a method in claim 1 wherein a. The assignment of image representation likely new correspondences is random at **(Col 2 Lines 28-34)**.

4.Regarding Claim 4, the method in claim 1 wherein a. There is no testing step or further improvement does not further limit the claim and is not a novel feature.

5. Regarding Claim 5, Khan discloses a method in claim 1 wherein Parts of the scene that become visible in the novel viewpoint image for which no data are present in the image being warped because of occlusion in the said image being warped are provided by some other image from yet another viewpoint for which appropriate correspondences exist at **(Col 9 Lines 20-26)**. The data for the novel viewpoint image comes from the other images from the cameras by the constant velocity based tracking and has appropriate correspondence. This reduces occlusion in the images. The constant velocity based assumption in the tracker gets the data from other viewpoint for the construction of the novel viewpoint.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jayesh A. Patel whose telephone number is 571-270-1227. The examiner can normally be reached on M-F 7.00am to 4.30 pm (5-4-9). If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Jingge Wu can be reached on 571-272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jayesh Patel
2/07/07

JP


JINGGE WU
SUPERVISORY PATENT EXAMINER